November 19, 2009

Dear Snow Spotter,

Another winter season will soon be upon us, and it is time to activate the National Weather Service Wilmington Ohio snow spotter network.

If you are new to the National Weather Service Wilmington Ohio Snow Spotter Network- WELCOME!! We would like to thank you for volunteering.

The reason for having a Snow Spotter Network is to provide our forecasters with near real-time snowfall information (i.e. ground truth). As with severe weather, our forecasters can infer what is currently going on or what will happen in the near future using various tools (Radar, Satellite, Model Data, etc.). However, knowing how much snow that has actually fallen ("ground truth") allows us to monitor the progress of a storm and make critical decisions about Advisories and Warnings for a particular winter storm.

The snowfall information collected will be used in several ways. First, it will be used to help our forecasters make real-time decisions during a winter storm. Second, it will be used to provide a summary of what actually happened for all of our customers (State and Local officials, Media, and you). Finally, this ground truth information will be used to help our forecasters evaluate the quality of their forecasts, which will help improve the forecast of future winter storms. **This is all thanks to you!!!**

As a snow spotter, we would like you to report **in real-time** the following information:

What to Report	**When to Report**
❖ 1" or more of snow per hour	Anytime
❖ 1" or more of snow during the past 24 hours	Preferably between 5-8 am/pm
❖ **Total Snow Depth**	Preferably between 5-8 am/pm
❖ **When you first measure 2"…4" and 6"**	Anytime
❖ **Any freezing rain/drizzle**	Anytime
❖ **Thunder/lightning** associated with snow/sleet/freezing rain	Anytime

Our toll free unlisted number is (800) 899-2748. On occasion, we may give you a call during a snow event. We will only call during the times you approved of on your Severe Weather Spotter application.

In addition to phone reports, you can use our web-based reporting program called eSpotter. eSpotter is a system that allows spotters to easily submit winter or severe weather reports online. The use of the system is currently available for trained spotters and emergency managers. Last year we received nearly half of our reports via eSpotter.

If you have not signed up yet and want to, then go to http://espotter.weather.gov/ and click on **New to eSpotter?** [Register Here]. Once you've registered then you will get a reply within 10 business days with a temporary password. Note, once you can log on with a password click on Create a Report in the top left hand corner. This will take you to a severe weather report form. Near the top there is a clickable link for a winter weather report form.

If you don't have online access to eSpotter, then feel free to call our *unlisted* number (800) 899-2748. On occasion, we may give you a call during a snow event. We will only call during the times that you provided to us on your Severe Weather Spotter application.

Below are some tips for measuring snow:

Measuring snow is a rough art and can be very subjective. A lot depends on frequency and location of your measurement. You want a cold flat surface that is somewhat protected from the wind, but not so protected that snowfall measurements will be inaccurate. On the web at www.erh.noaa.gov/iln/spotterpage/spotter.htm under training you will find a PowerPoint presentation on how to measure snow along with a brief tutorial on the same subject. Below are some helpful hints for measuring snow. Figure 1 will provide some visual clues for these hints.

- **Surface**:
  - First choose a convenient spot away from the obstacles such as a house, garage, shed, fence, large bushes, and trees, ideally about 10-12 feet from a 6 foot fence. These objects aid in the piling up (drifting) of snow near them. The ideal spot will usually be in the middle of your back or front yard away from trees.
  - Ideally a snowboard (simply a piece of plywood cut in about a 2 ft square and painted white), an outdoor table, or a deck are the best measuring surfaces. If you use a snowboard on the ground, then a flag or some other marker will help you locate it during snowy weather.
    - Pavement is OK if it's cold (below 32 F), but should not be used under milder conditions due to melting.
    - Grass is too uneven...especially in the fall and after green up in the spring. Grass may be used in the middle of winter, if it's dead and not puffy.
    - Bare ground is OK. Do not mistake an ice layer or crusted snow as the "ground".
    - Picnic table and autos are fine if winds are light.
  - If possible, clean off the surface you are measuring for your next measurement. If measuring on a surface that already has a covering of snow, then subtract the old snow from the new.

- **Wind/Drifting:** If drifting is a problem, take several measurements and average them. Bare ground will give you a zero reading. Do not include the largest drifts.
- **Frequency:** Do not measure more than once an hour. Hourly measurements will be extremely helpful when snowfall rates are exceptional (1" or more per hour). In general, once every several hours (3 to 6) is preferable, unless the snow is melting.
- **Total snowfall:** Report to the nearest tenth of an inch.
- **Snow Depth:** Report to the nearest whole inch. Roundup at 0.5 inches. ***The optimal conditions*** *for measuring snow are to find a piece of wood (wooden picnic table or piece of plywood) in an open area where snow will fall unhindered and yet not drift from blustery winds. After measuring the snow, clean off the piece of wood for your next reading.*

Below are some tips for measuring ice:

- Measure on an outside surface such as a fence, picnic table, car, tree limb, etc. Make sure that there is no internal heat source.
- When measuring, use a ruler and your eyes to estimate how thick the ice has accumulated.
- Do not measure the length of icicles.
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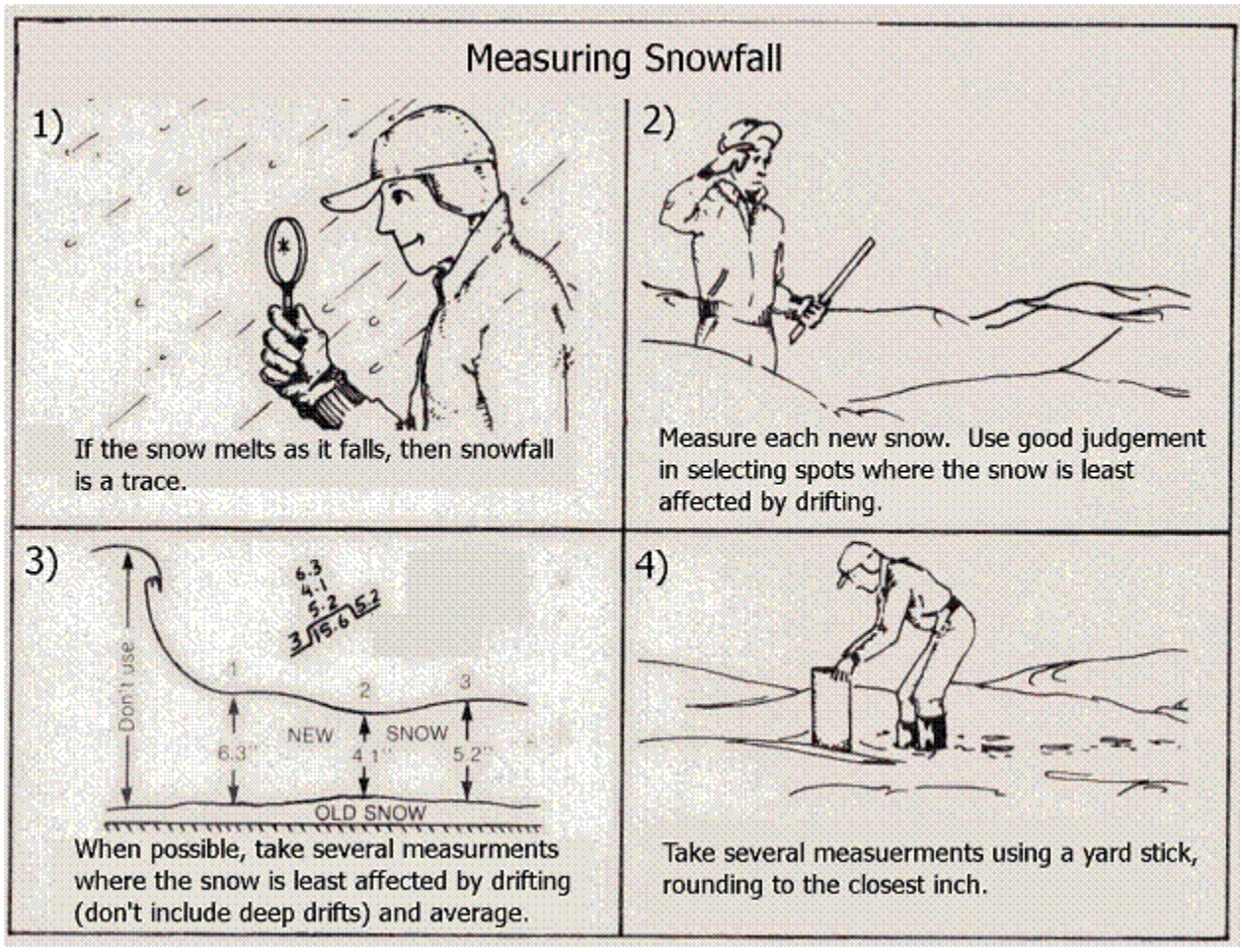

Figure 1 – Schematic showing how to measure snow..

Thanks again for volunteering! Your time and effort is greatly appreciated. Feel free to call me at (937) 383-0031 if you have any questions.

Sincerely,

Mary Jo Parker
Warning Coordination Meteorologist
National Weather Service
Wilmington, Ohio